

FPL Energy Seabrook Station P.O. Box 300 Seabrook, NH 03874 (603) 773-7000

OCT 2 2 2004 SBK-L-04097 Docket No. 50-443

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555-0001

Seabrook Station
License Amendment Request 04-08

"Changes to Technical Specification 3.3.3.6, Accident Monitoring Instrumentation"

FPL Energy Seabrook, LLC (FPL Energy Seabrook) has enclosed herein License Amendment Request (LAR) 04-08. License Amendment Request 04-08 is submitted pursuant to the requirements of 10 CFR 50.90 and 10 CFR 50.4.

The proposed amendment revises Technical Specification (TS) 3.3.3.6, Accident Monitoring Instrumentation. Specifically, this change (1) revises the allowed outage times for inoperable post-accident monitoring (PAM) instrumentation, (2) eliminates the shutdown requirement for inoperable PAM instruments when the minimum required channels are operable, and (3) adds a provision that allows a separate action entry for each instrument function. These proposed changes are consistent with NUREG-1431, Revision 3, Improved Standard Technical Specifications (ISTS). Approval of this LAR will provide FPL Energy Seabrook adequate allowed outage times to implement on-line repairs to accident monitoring instrumentation, if required.

As discussed in the enclosed LAR Section IV, the proposed change does not involve a significant hazard consideration pursuant to 10 CFR 50.92. A copy of this letter and the enclosed LAR has been forwarded to the New Hampshire State Liaison Officer pursuant to 10 CFR 50.91(b). FPL Energy Seabrook has determined that LAR 04-08 meets the criteria of 10 CFR 51.22(c)(9) for a categorical exclusion from the requirements for an Environmental Impact Statement.

FPL Energy Seabrook requests NRC Staff review and approval of LAR 04-08 on an expedited schedule with issuance of a license amendment by January 12, 2005, and implementation of the amendment within 7 days. A failure to obtain this LAR may result in a shutdown of Seabrook Station in accordance with the current TS 3.3.3.6, Accident Monitoring Instrumentation.

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Pressurizer level recorder 1-RC-LR-460 is one of two channels of pressurizer level PAM instrumentation required to be operable by TS 3.3.3.6. This instrument is experiencing failures at an increasing frequency. The problem is associated with only the level recorder; the hardwire instrument for pressurizer level in the same instrument channel continues to remain operable with no degradation or deficiencies. Additionally, the redundant channel of instrumentation is not experiencing similar equipment problems.

Despite increased monitoring and preventative maintenance activities, recorder 1-RC-LR-460 continues to degrade. Correcting these unanticipated recorder failures will require a design change that modifies or replaces the recorder. FPL Energy Seabrook is aggressively pursuing several design change options that will resolve this equipment deficiency; however, implementation of the corrective action cannot be completed within the seven-day allowed outage time permitted by the current TS. While working towards a prompt resolution of this equipment problem, FPL Energy Seabrook is requesting this license amendment on an expeditious schedule to avoid an otherwise unnecessary shutdown of Seabrook Station.

Should you have any questions regarding this letter, please contact Mr. James M. Peschel, Regulatory Programs Manager, at (603) 773-7194.

Very truly yours,

FPL Energy Seabrook, LLC.

FOR

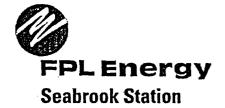
Mark E. Warner Site Vice President

cc: S. J. Collins, NRC Region I Administrator

S. P. Wall, NRC Project Manager, Project Directorate I-2

G.T. Dentel, NRC Senior Resident Inspector

Mr. Bruce Cheney, Director New Hampshire Office of Emergency Management State Office Park South 107 Pleasant Street Concord, NH 03301



# **SEABROOK STATION UNIT 1**

Facility Operating License NPF-86 Docket No. 50-443

License Amendment Request 04-08,

"Changes to TS 3.3.3.6. Accident Monitoring Instrument

The following information is enclosed in support of this License Amendment Request:

**Section I** Introduction and Safety Assessment for Proposed Change

**Section II** Markup of Proposed Change

**Section III Retype of Proposed Change** 

**Section IV Determination of Significant Hazards for Proposed Change** 

Section V Proposed Schedule for License Amendment Issuance And Effectiveness

Section VI **Environmental Impact Assessment** 

I, Gene F. St. Pierre, Station Director of FPL Energy Seabrook, LLC hereby affirm that the information and statements contained within this License Amendment Request are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

Sworn and Subscribed

before me this

Gene F. St. Pierre

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**Station Director** 

#### I. INTRODUCTION AND SAFETY ASSESSMENT FOR PROPOSED CHANGE

#### Introduction

The proposed license amendment request (LAR) revises Technical Specification (TS) 3.3.3.6, Accident Monitoring Instrumentation. Specifically, this change (1) revises the allowed outage times (AOT) for inoperable post-accident monitoring (PAM) instrumentation, (2) eliminates the shutdown requirement for inoperable PAM instruments when the minimum required channels are operable, and (3) adds a provision that allows a separate action entry for each instrument function. These proposed changes are consistent with NUREG-1431, Revision 3, Improved Standard Technical Specifications (ISTS). Approval of this LAR will provide FPL Energy Seabrook adequate allowed outage times to implement on-line repairs to accident monitoring instrumentation, if required.

### **Background**

The allowed outage times in current Technical Specification 3.3.3.6, Accident Monitoring Instrumentation, are based on NUREG-0452, Westinghouse Standard Technical Specifications. With an accident monitoring channel inoperable, NUREG-0452 allows 7 days to restore the channel to operable status. If the instrument channel cannot be restored to operable status within the time allowed, a plant shut down is required. If no instrument channels are available to monitor a particular parameter, 48 hours are allowed to restore the inoperable channel(s) to operable status before a plant shut down is required

The ISTS extended the 7-day completion time for one inoperable instrument channel and the 48-hour completion time for two inoperable channels to 30 days and 7 days, respectively. Additionally, the ISTS removed the shut down requirement for a single inoperable instrument channel. With one channel inoperable beyond 30 days, a Special Report outlining the preplanned method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels must be submitted to the NRC within the next 14 days. With two channels inoperable for more than 7 days, the ISTS requires either a plant shutdown or submittal of a Special Report, as discussed above, depending on the particular channel that is out of service. The ISTS also contains a provision that permits a separate condition entry for each inoperable instrument function.

# Description of the Proposed Changes

The proposed changes revise Technical Specification 3.3.3.6 to be consistent with LCO 3.3.3, PAM Instrumentation, in the ISTS (NUREG 1431, revision 3). The proposed changes are as follows:

#### New Note

This change modifies TS 3.3.3.6 with a note that allows a separate action entry for each inoperable PAM instrument, consistent with the ISTS. The actions of this TS may be entered independently for each instrument listed in TS Table 3.3-10, Accident Monitoring Instrumentation. The AOT of the inoperable instruments will be tracked separately, starting from the time of discovery of the inoperable instrument channel.

### TS 3.3.3.6, Action a.

Action a. applies when the number of operable channels is less than the total number of channels. Action a. has two components:

- 1) The inoperable channel(s) are required to be restored to operable status within 7 days, and
- 2) A shutdown track that requires the plant to be in at least Hot Standby within the next 6 hours and in at least Hot Shutdown within the following 6 hours if the channel(s) is not restored to operable status within the 7-day AOT.

The first component of Action a. is revised to require the inoperable channel(s) to be restored within 30 days. This is consistent with the completion time in LCO 3.3.3 of the ISTS.

The second component of Action a. is revised to remove the shutdown track and replace it with a requirement to submit a Special Report pursuant to Specification 6.8.2 within the next 14 days if the 30-day AOT is exceeded. Submitting a Special Report is consistent with the required action in LCO 3.3.3 of the ISTS.

#### TS 3.3.3.6, Action b.

Action b. applies when the number of operable channels is less than the minimum number of channels. (The containment Post-LOCA high range area monitor is excluded from the requirements of action b). Action b. has two components:

- 1.) The inoperable channels are required to be restored to operable status within 48 hours, and
- 2.) A shutdown track that requires the plant to be in at least Hot Standby within the next 6 hours and in at least Hot Shutdown within the following 6 hours if the channel(s) is not restored to operable status within the 48-hour AOT.

The first component of Action b. is revised to require the inoperable channels to be restored within 7 days. This is consistent with the completion time in LCO 3.3.3 of the ISTS.

The second component of Action b. is unchanged, i.e., the shutdown track remains. This is consistent with the required action in LCO 3.3.3 of the ISTS.

As currently licensed, Action b. will continue to be excluded from the provisions of Specification 3.0.4

### Safety Assessment of Proposed Changes

Seabrook Station current Technical Specification 3.3.3.6, Accident Monitoring Instrumentation, ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, Revision 3, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," May 1983; and NUREG 0737, "Clarification of TMI Action Plan Requirements," November 1980.

The changes proposed in this LAR modify the actions for inoperable PAM instrumentation while retaining the existing required instrumentation. The revised actions are consistent with the conditions and completion times contained in NUREG 1431, revision 3, Improved Standard Technical Specifications (ISTS) for Westinghouse Plants.

### New Note

This change modifies TS 3.3.3.6 to allow a separate action entry for each inoperable PAM instrument. The actions of this TS may be entered independently for each instrument listed in TS Table 3.3-10, Accident Monitoring Instrumentation. The AOT of the inoperable instruments will be tracked separately, starting from the time of discovery of the inoperable instrument channel. This change clarifies the application of the actions for multiple inoperable instruments, and is consistent with the note in the ISTS that states: "Separate Condition entry is allowed for each Function."

#### **TS 3.3.3.6, Action a**

Current TS 3.3.3.6, Action a. requires restoring an inoperable PAM instrument to operable status within 7 days when the number of operable channels is less than the total number of channels, and the minimum channels operable requirement is met. This proposed change revises the AOT to allow 30 days to restore an inoperable channel. The 30-day AOT takes into account the remaining operable channel(s) or other non-Regulatory Guide 1.97 instrumentation, the passive nature of the instruments (these instruments provide information but do not provide inputs to systems that result in automatic actions), and the low probability of an event requiring PAM instrumentation during the 30-day period.

The current TS also requires a plant shutdown following expiration of the seven day AOT. This change eliminates the shutdown requirement and adds a requirement for submitting a 14-day special report to the NRC. The report will discuss the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrument to operable status. This action is appropriate in lieu of a plant shutdown since alternate actions are identified and the likelihood of an event requiring information from this instrumentation is low.

# TS 3.3.3.6, Action b

TS 3.3.3.6, Action b. currently allows 48 hours to restore inoperable PAM instruments, with the exception of the containment post-LOCA high range area radiation monitor, when the number of operable channels is less than the minimum channels operable requirement. Consistent with the ISTS, this change revises the AOT to permit seven days to restore PAM instrument operability. The seven-day AOT is based on the relatively low probability of an event requiring reliance on the PAM instrumentation. Requiring restoration of one inoperable channel within seven days limits the risk that the PAM function will be degraded in the event of an accident. Continuous operation with less than the required minimum channels is not acceptable; therefore, a plant shutdown is required with less than the required minimum channels operable following expiration of the seven day AOT.

# **SECTION II**

# MARKUP OF PROPOSED CHANGE

Refer to the attached markup of the proposed change to the Technical Specifications. The attached markup reflects the currently issued revision of the Technical Specifications listed below. Pending Technical Specifications or Technical Specification changes issued subsequent to this submittal are not reflected in the enclosed markup.

The following Technical Specifications are included in the attached markup:

Technical Specification	<u>Title</u>	Page
3.3.3.6	Accident Monitoring Instrumentation	3/4 3-49 3/4 3-50 3/4 3-51
B3/4.3.3.6	Accident Monitoring Instrumentation	B3/4 3-5

# **INSTRUMENTATION**

# MONITORING INSTRUMENTATION

# ACCIDENT MONITORING INSTRUMENTATION

### LIMITING CONDITION FOR OPERATION

3.3.3.6 The accident monitoring instrumentation channels shown in Table 3.3-10 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

# **ACTION:**

a. With the number of OPERABLE accident monitoring instrumentation channels less than the Total Number of Channels shown in Table 3.3-10, restore the inoperable channel(s) to OPERABLE status within days, or be in at least HOT STANDBY within the next 6 hours and in at least HOT SHUTDOWN within the following 6 hours. The provisions of Specification 3.0.4 are not applicable.

INSERT (NOTE

- b. With the number of OPERABLE accident monitoring instrumentation channels except the containment POST-LOCA high range area monitor, less than the Minimum Channels OPERABLE requirements of Table 3.3-10, restore the inoperable channel(s) to OPERABLE status within 48 hours or be in at least HOT STANDBY within the next 6 hours and in at least HOT SHUTDOWN within the following 6 hours. The provisions of Specification 3.0.4 are not applicable.
- c. With the number of OPERABLE channels for the containment Post-LOCA high range area monitor less than required by the Minimum Channels OPERABLE requirements, initiate an alternate method of monitoring the appropriate parameter(s), within 72 hours, and either restore the inoperable channel(s) to OPERABLE status within 7 days or prepare and submit a Special Report to the Commission, pursuant to Specification 6.8.2, within 14 days that provides actions taken, cause of the inoperability, and the plans and schedule for restoring the channels to OPERABLE status.

### SURVEILLANCE REQUIREMENTS

4.3.3.6 Each accident monitoring instrumentation channel shall be demonstrated OPERABLE:

- a. Every 31 days by performance of a CHANNEL CHECK, and
- b. Every 18 months by performance of a CHANNEL CALIBRATION.

INSERT (A

INSERT NOTE
NOTE
A separate ACTION entry is allowed for each INSTRUMENT listed in Table 3.3-10
••••••

# **INSERT A**

submit a Special Report to the Commission pursuant to Specification 6.8.2 within the next 14 days outlining the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation to OPERABLE status.

# **TABLE 3.3-10**

# ACCIDENT MONITORING INSTRUMENTATION

INSTRUMENT		TOTAL NO. OF CHANNELS	MINIMUM CHANNELS OPERABLE
1.	Containment Pressure		
	a. Normal Range b. Extended Range	2 2	1
2.	Reactor Coolant Outlet Temperature - THOT (Wide Range)	4	2
3.	Reactor Coolant Inlet Temperature - T <sub>COLD</sub> (Wide Range)	4	2
4.	Reactor Coolant Pressure - Wide Range	2	1
5.	Pressurizer Water Level	2	1
6.	Steam Generator Pressure	2/steam generator	1/steam generator
7.	Steam Generator Water Level - Narrow Range	1/steam generator	1/steam generator
8.	Steam Generator Water Level - Wide Range	1/steam generator	1/steam generator
9.	Refueling Water Storage Tank Water Level	2	1
10.	Reactor Coolant System Subcooling Margin Monitor	2	1
11.	Containment Building Water Level	2	1
12.	Core Exit Thermocouples	4/core quadrant	2/core quadrant
13.	Containment Post-LOCA Area Monitor	2	1

# TABLE 3.3-10 (Continued)

# ACCIDENT MONITORING INSTRUMENTATION

INSTRUMENT		TOTAL NO. OF <u>CHANNELS</u>	MINIMUM CHANNELS <u>OPERABLE</u>
14. Intermediate Range Neutron F	ilux	2	1
15. Intermediate Range Neutron F	ilux Rate	2	1
16. Containment Isolation Valve P	osition*	2/Penetration	1/Penetration
17. Containment Enclosure Negat	ive Pressure	2	1
18. Condensate Storage Tank Wa	ter Level**	2	1
19. Reactor Vessel Level Indication	n System	2	1
20. Containment Hydrogen Conce	ntration	2	1

<sup>\*</sup>Applies to penetrations with 2 active valves in series. These valves are moved to the closed position by automatic signals.

<sup>\*\*</sup>Calculated on basis of pressure sensed at suction to the Emergency Feedwater Pumps.

# MONITORING INSTRUMENTATION

# 3/4.3.3.5 REMOTE SHUTDOWN SYSTEM (Continued)

The OPERABILITY of the Remote Shutdown System ensures that a fire will not preclude achieving safe shutdown. The Remote Shutdown System instrumentation, control, and power circuits and transfer switches necessary to eliminate effects of the fire and allow operation of instrumentation, control and power circuits required to achieve and maintain a safe shutdown condition are independent of areas where a fire could damage systems normally used to shut down the reactor. This capability is consistent with General Design Criterion 3 and Appendix R to 10CFRPart 50.

# 3/4.3.3.6 ACCIDENT MONITORING INSTRUMENTATION

BACKGROUND

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, Revision 3, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," May 1983 and NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980.

3/4.3.3.7 (THIS SPECIFICATION NUMBER IS NOT USED)

3/4.3.3.8 (THIS SPECIFICATION NUMBER IS NOT USED)

3/4.3.3.9 (THIS SPECIFICATION NUMBER IS NOT USED)

INSERT BASES

# 3/4.3.3.10 EXPLOSIVE GAS MONITORING INSTRUMENTATION

The explosive gas instrumentation is provided to monitor and control, the concentrations of potentially explosive gas mixtures in the WASTE GAS HOLDUP SYSTEM. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50.

SEABROOK - UNIT 1

B 3/4 3-5

BGR No. 00-02

Amendment No.

Revised by NRG-Tetter dated 6/8/01

#### **INSERT BASES**

LCO

The purpose of the post-accident monitoring (PAM) instrumentation required by this Technical Specification (TS) is to enable the operator to monitor safety functions, take any manual actions required to support the accomplishment of safety functions, and determine the effect of manual actions during and following a design basis accident. The instrumentation also enables the operator to maintain the plant in a hot shutdown condition, or to proceed to cold shutdown.

The instrument channels required to be operable by this LCO include two classes of parameters identified during implementation of Regulatory Guide 1.97: Type A variables and Category 1 key variables. Type A variables are those that provide primary information for the control room operators to take specific preplanned manual actions for which no automatic control is provided. These actions are required for safety systems to accomplish their safety functions for design basis accident events. (Actions taken as a result of equipment failures, e.g., "Response Not Obtained" column in the Emergency Operating Procedures (EOPs), are excluded). Key variables are those variables that provide the primary information (essential for the direct accomplishment of the specified safety functions) required to permit the control room operating crew to:

- a. Perform the diagnosis specified in the EOPs for design basis accidents
- b. Take any manual action required to mitigate the consequences of an accident
- c. Monitor the operation of safety systems.

The PAM instruments controlled by this TS are identified with an orange nameplate containing black lettering. PAM instruments, such as dedicated recorders and plasma displays are provided where direct and immediate trend or transient information is essential for operator information or action. An operable PAM recorder must be capable of measuring, displaying (plasma display), and recording (chart recorder) the parameter's trend information.

#### **ACTIONS**

Note

This note clarifies the application of the AOT for multiple, inoperable instruments. The actions of this specification may be entered independently for each item listed under the heading INSTRUMENT in Table 3.3-10. The AOT of the inoperable channels will be tracked separately for each instrument starting at the time the action was entered for that instrument.

#### Action a.

Action a. applies when an instrument has one or more inoperable channels but the minimum channels operable requirement is met. The 30 day allowed outage time (AOT) takes into account the remaining operable channels, the passive nature of the instruments (no critical automatic action is assumed to occur from these instruments), and the low probability of an event requiring PAM instrumentation during this interval.

If the inoperable channels are not restored within 30 days, the action requires submittal of a written report to the NRC within the next 14 days. The report discusses the cause of the inoperability, alternative actions, and the plans and schedule for restorative actions. Submitting a report in lieu of a plant shut down is appropriate since the report identifies a preplanned method of monitoring and the likelihood of plant conditions that would require information provided by this instrumentation is low.

#### Action b.

Action b applies when an instrument has less than the required minimum number of operable channels. The 7 day AOT is based on the relatively low probability of an event requiring PAM instrumentation and the availability of alternate means (non-Regulatory Guide 1.97 instruments) to monitor the parameter. Continuous operation with less than the minimum required channels is not acceptable because alternate indication may not meet fully meet the performance qualifications applied to PAM instrumentation.

# Action c.

Action c. applies to the containment post-LOCA high range area radiation monitor when less than the minimum required channels are operable. Seventy-two hours is permitted to initiate the alternate method of monitoring for the post-LOCA monitor. If the monitor is not restored to operable status within the 7-day AOT, a report that discusses the actions taken, the cause of the inoperability, and the plans and schedule for restoring the instruments to operable status must be submitted to the NRC within 14 days

### SECTION III

# **RETYPE OF PROPOSED CHANGE**

Refer to the attached retype of the proposed change to the Technical Specifications. The attached retype reflects the currently issued version of the Technical Specifications. Pending Technical Specification changes or Technical Specification changes issued subsequent to this submittal are not reflected in the enclosed retype. The enclosed retype should be checked for continuity with Technical Specifications prior to issuance.

The following Technical Specifications are included in the attached retype:

Technical Specification	<u>Title</u>	Page
3.3.3.6	Accident monitoring Instrumentation	3/4 3-49 3/4 3-49a
B3/4.3.3.6	Accident Monitoring Instrumentation	B3/4 3-5 B3/4 3-6 B3/4 3-7

# **INSTRUMENTATION**

### MONITORING INSTRUMENTATION

# ACCIDENT MONITORING INSTRUMENTATION

### LIMITING CONDITION FOR OPERATION

3.3.3.6 The accident monitoring instrumentation channels shown in Table 3.3-10 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.
NOTE
A separate ACTION entry is allowed for each INSTRUMENT listed in Table 3.3-10.

# **ACTION:**

- a. With the number of OPERABLE accident monitoring instrumentation channels less than the Total Number of Channels shown in Table 3.3-10, restore the inoperable channel(s) to OPERABLE status within 30 days, or submit a Special Report to the Commission pursuant to Specification 6.8.2 within the next 14 days outlining the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation to OPERABLE status.
- b. With the number of OPERABLE accident monitoring instrumentation channels except the containment POST-LOCA high range area monitor, less than the Minimum Channels OPERABLE requirements of Table 3.3-10, restore the inoperable channel(s) to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in at least HOT SHUTDOWN within the following 6 hours. The provisions of Specification 3.0.4 are not applicable.
- c. With the number of OPERABLE channels for the containment Post-LOCA high range area monitor less than required by the Minimum Channels OPERABLE requirements, initiate an alternate method of monitoring the appropriate parameter(s), within 72 hours, and either restore the inoperable channel(s) to OPERABLE status within 7 days or prepare and submit a Special Report to the Commission, pursuant to Specification 6.8.2, within 14 days that provides actions taken, cause of the inoperability, and the plans and schedule for restoring the channels to OPERABLE status.

# SURVEILLANCE REQUIREMENTS

4.3.3.6 Each accident monitoring instrumentation channel shall be demonstrated OPERABLE:

- a. Every 31 days by performance of a CHANNEL CHECK, and
- b. Every 18 months by performance of a CHANNEL CALIBRATION.

SEABROOK - UNIT 1 3/4 3-49a Amendment No.

### MONITORING INSTRUMENTATION

# 3/4.3.3.5 REMOTE SHUTDOWN SYSTEM (Continued)

The OPERABILITY of the Remote Shutdown System ensures that a fire will not preclude achieving safe shutdown. The Remote Shutdown System instrumentation, control, and power circuits and transfer switches necessary to eliminate effects of the fire and allow operation of instrumentation, control and power circuits required to achieve and maintain a safe shutdown condition are independent of areas where a fire could damage systems normally used to shut down the reactor. This capability is consistent with General Design Criterion 3 and Appendix R to 10CFRPart 50.

### 3/4.3.3.6 ACCIDENT MONITORING INSTRUMENTATION

### **BACKGROUND**

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, Revision 3, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," May 1983 and NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980.

### LCO

The purpose of the post-accident monitoring (PAM) instrumentation required by this Technical Specification (TS) is to enable the operator to monitor safety functions, take any manual actions required to support the accomplishment of safety functions, and determine the effect of manual actions during and following a design basis accident. The instrumentation also enables the operator to maintain the plant in a hot shutdown condition, or to proceed to cold shutdown.

The instrument channels required to be operable by this LCO include two classes of parameters identified during implementation of Regulatory Guide 1.97: Type A variables and Category 1 key variables. Type A variables are those that provide primary information for the control room operators to take specific preplanned manual actions for which no automatic control is provided. These actions are required for safety systems to accomplish their safety functions for design basis accident events. (Actions taken as a result of equipment failures, e.g., "Response Not Obtained" column in the Emergency Operating Procedures (EOPs), are excluded). Key variables are those variables that provide the primary information (essential for the direct accomplishment of the specified safety functions) required to permit the control room operating crew to:

# 3/4.3.3.6 ACCIDENT MONITORING INSTRUMENTATION (Continued)

# LCO (Continued)

- a. Perform the diagnosis specified in the EOPs for design basis accidents.
- b. Take any manual action required to mitigate the consequences of an accident.
- c. Monitor the operation of safety systems.

The PAM instruments controlled by this TS are identified with an orange nameplate containing black lettering. PAM instruments, such as dedicated recorders and plasma displays are provided where direct and immediate trend or transient information is essential for operator information or action. An operable PAM recorder must be capable of measuring, displaying (plasma display), and recording (chart recorder) the parameter's trend information.

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a. Action a. applies when an instrument has one or more inoperable channels but the minimum channels operable requirement is met. The 30-day allowed outage time (AOT) takes into account the remaining operable channels, the passive nature of the instruments (no critical automatic action is assumed to occur from these instruments), and the low probability of an event requiring PAM instrumentation during this interval.

If the inoperable channels are not restored within 30 days, the action requires submittal of a written report to the NRC within the next 14 days. The report discusses the cause of the inoperability, alternative actions, and the plans and schedule for restorative actions. Submitting a report in lieu of a plant shut down is appropriate since the report identifies a preplanned method of monitoring and the likelihood of plant conditions that would require information provided by this instrumentation is low.

# 3/4.3.3.6 ACCIDENT MONITORING INSTRUMENTATION (Continued)

### **ACTION:**

- b. Action b. applies when an instrument has less than the required minimum number of operable channels. The 7-day AOT is based on the relatively low probability of an event requiring PAM instrumentation and the availability of alternate means (non-Regulatory Guide 1.97 instruments) to monitor the parameter. Continuous operation with less than the minimum required channels is not acceptable because alternate indication may not fully meet the performance qualifications applied to PAM instrumentation.
- c. Action c. applies to the containment post-LOCA high range area radiation monitor when less than the minimum required channels are operable. Seventy-two hours is permitted to initiate the alternate method of monitoring for the post-LOCA monitor. If the monitor is not restored to operable status within the 7-day AOT, a report that discusses the actions taken, the cause of the inoperability, and the plans and schedule for restoring the instruments to operable status must be submitted to the NRC within 14 days.
- 3/4.3.3.7 (THIS SPECIFICATION NUMBER IS NOT USED)
- 3/4.3.3.8 (THIS SPECIFICATION NUMBER IS NOT USED)
- 3/4.3.3.9 (THIS SPECIFICATION NUMBER IS NOT USED)

# 3/4.3.3.10 EXPLOSIVE GAS MONITORING INSTRUMENTATION

The explosive gas instrumentation is provided to monitor and control, the concentrations of potentially explosive gas mixtures in the WASTE GAS HOLDUP SYSTEM. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50.

# 3/4.3.4 (THIS SPECIFICATION NUMBER IS NOT USED)

### IV. DETERMINATION OF SIGNIFICANT HAZARDS FOR PROPOSED CHANGE

In accordance with 10 CFR 50.92, FPL Energy Seabrook has concluded that the proposed changes do not involve a significant hazards consideration (SHC). The basis for the conclusion that the proposed changes do not involve a SHC is as follows:

1. The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed changes revise the actions and allowed outage times (AOT) for inoperable post-accident monitoring (PAM) instrumentation. The PAM instrumentation is not an initiator of any previously evaluated accident. Furthermore, the PAM instruments are passive devices; the instruments do not actuate or control any plant systems or components. As a result, the probability of any accident previously evaluated is not increased by these proposed changes. While this change extends the AOT for inoperable instruments, the Technical Specifications will continue to require the availability of operable PAM instrumentation for monitoring and assessing specific plant parameters during and following an accident. The PAM instruments have no impact on the ability of systems to perform the safety functions of shutting down the reactor, removing decay heat, controlling radioactive releases, or mitigating accident consequences. The length of time that a PAM instrument has been inoperable has no effect on the consequences of an accident should an accident occur. As a result, extending the AOT for these instruments will not significantly increase the consequences of accidents previously evaluated.

2. The proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

The proposed changes neither install or remove any plant equipment, nor alter the design, physical configuration, or mode of operation of any plant structure, system, or component. The accident monitoring instrumentation consists of passive devices and is not an initiator of any accident. No physical changes are being made to the plant, so no new accident causal mechanisms are being introduced. Therefore, operation of the facility in accordance with the proposed amendments will not create the possibility of a new or different kind of accident from any previously evaluated.

3. The proposed changes do not involve a significant reduction in the margin of safety.

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The proposed changes do not alter the design, configuration, operation, or function of any plant system, structure, or component. The ability of any operable structure, system, or component to perform its designated safety function is unaffected by this change. These proposed changes allow an appropriate time to restore inoperable PAM instruments to operable status when one or more channels of a required instrument function become inoperable. The additional time to restore an inoperable channel to operable status is appropriate based on the low probability of an event requiring the accident monitoring instrumentation during the interval, providing a reasonable time for repair of the instrumentation, and alternate means of obtaining the required information. Moreover, with the exception of the containment post-LOCA high range area monitor (as currently licensed) this change retains the requirement to shut down the plant if less than a minimum number of instrument channels of the required parameters are operable. Therefore, operation of the facility in accordance with the proposed amendment will not involve a significant reduction in the margin of safety.

Based on the above, FPL Energy Seabrook has determined that the proposed amendment does not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any previously evaluated, or (3) involve a significant reduction in the margin of safety. Consequently, this proposed change does not involve a significant hazards consideration.

# V. <u>PROPOSED SCHEDULE FOR LICENSE AMENDMENT ISSUANCE AND EFFECTIVENESS</u>

FPL Energy Seabrook requests NRC review of License Amendment Request 04-08, and issuance of a license amendment by January 12, 2005, having immediate effectiveness and implementation within 7 days.

# VI. <u>ENVIRONMENTAL IMPACT ASSESSMENT</u>

FPL Energy Seabrook has reviewed the proposed license amendment against the criteria of 10 CFR 51.22 for environmental considerations. The proposed changes do not involve a significant hazards consideration, nor increase the types and amounts of effluent that may be released offsite, nor significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, FPL Energy Seabrook concludes that the proposed changes meet the criteria delineated in 10 CFR 51.22(c)(9) for a categorical exclusion from the requirements for an Environmental Impact Statement.